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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,873	01/16/2004	Kraig A. Kirschner	7234-111N1	8423

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LOS ANGELES, CA 900172576

EXAMINER

BRITTAIN, JAMES R

ART UNIT PAPER NUMBER

3677

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/759,873

Applicant(s)

KIRSCHNER, KRAIG A.

Examiner

James R. Brittain

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uw

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/16/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 10-12 of copending Application No. 09/844807 in view of Rebentisch (US 4784552). Although the conflicting claims are not identical, they are not patentably distinct from each other because allowed claim 10 includes the steel web joist including a beam with two angle elements, an anchor plate, an engagement plate and stud. While allowed claim 10 describes the engagement plate as having an engagement profile, the profile is described in detail as having a tapered tongue and diverging shoulders and pending claim 1 does not detail the structure of the engagement profile, the broad recitation of an engagement profile in pending claim 1 is obvious over the detailed structure of the engagement profile of allowed claim 10 because it performs the same function. Further, pending claim 1 recites the upstanding portions as being at an obtuse angle substantially greater than 90 degrees. While allowed claim 11, recites the upstanding engagement portion being at an obtuse angle, it does not state that the obtuse angle is substantially greater than 90 degrees. It

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would have been obvious to modify the claimed structure of copending Application No. 09/844807 to have the upstanding portions extend at an obtuse angle substantially greater than 90 degrees in view of Rebentisch (US 4784552) (figures 2, 3) teaching the upstanding engagement portions 24 extending at an obtuse angle substantially greater than 90 degrees from the flat anchor portion so as to form a biting edge to grip the legs 26 to thereby more securely hold the engagement plate to the channel and prevent it from moving (col. 2, lines 41-48), a significant advantage to maintain the correct position of the connection. In regard to pending claim 2, allowed claim 11 suggests this subject matter. As to pending claim 3, allowed claim 10 suggests the tongue and shoulders as indicated above, thereby rendering obvious the subject matter of this claim.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 2 are rejected under 35 U.S.C. §103(a) as being unpatentable over applicant's description of the prior art as described in the information disclosure statement received July 30, 2001 in parent application 09/844807 and made of record in this application in view of Koyama (US 5259165) and Rebentisch (US 4784552).

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Applicant's description of the prior art is described in the information disclosure statement received July 30, 2001 in parent application 09/844807 and made of record in this application. Therein applicant describes how the AFCON Flyer 962 square washer is utilized by stating that "This washer is prior art to the present invention and has been employed in the prior art in pairs with a threaded shaft extending therebetween, held by nuts where the washers are placed above and below a cord space in the upper beam of a steel web joist such as disclosed in the resent application. Hangers have been coupled with the shaft extending between the washers. This coupling is typically below the lower washer and is held in place by the nut threaded onto the shaft." Thus applicant has described a seismic suspension system with a steel web joist such as disclosed in this application with the two angle elements, each having a first leg and a second leg, the first legs being parallel with a cord space therebetween and the second legs extending in opposite direction, an anchor plate and an engagement plate placed respectively above and below the cord space with the anchor plate held in juxtaposition with the second legs and the engagement plate held against the edges of the first legs by nuts upon a threaded shaft. The threaded shaft extends below the engagement plate and can receive a hanger, which is secured by the lower nut. The prior art described by applicant fails to provide the engagement plate with upstanding engagement portions to either side of the flat anchor portion, the engagement plate extending across the cord space with each upstanding engagement portion having a distal edge with an engagement profile in interlocking engagement with the first legs wherein each engagement portion being at an obtuse angle substantially greater than 90 degrees to the flat anchor portion. However, Koyama (figures 3, 4 and claims 1 and 3-6) teaches a similar suspension system and further suggests in combination the steel web joist including a beam with

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two angle elements 4, each having a first leg and a second leg, the first legs being parallel with a cord space therebetween and the second legs extending in opposite directions; an anchor plate 2 having a first hole 2g therethrough; an engagement plate 3 including a flat anchor portion 3c having a second hole 3g therethrough and upstanding engagement portions 3a, 3b to either side of the flat anchor portion 3c, the engagement plate 3 extending across the cord space opposite the anchor plate 2, the upstanding engagement portion 3a having a distal edge with an engagement profile defined by central tongue 3e extending between the shoulders 3d, the other upstanding engagement portion 3b has a distal edge with an engagement profile defined by central tongue 3f which interlocks the engagement portion 3b between the first legs so that it will not move laterally to either the left or right as shown in figure 4.

FIG. 3

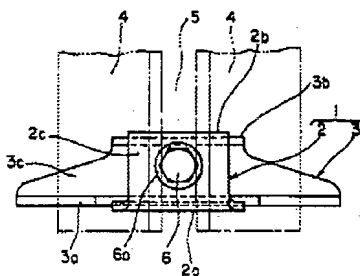
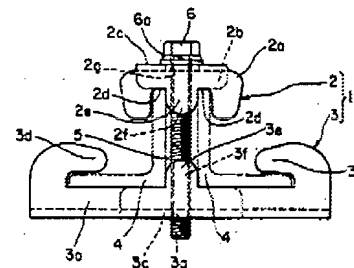


FIG. 4



The engagement plate secures interlocks the first legs together by contacting the first legs between the second legs by the tongue 3e. Applicant indicates the structure that provides interlocking engagement in the specification [0007] by stating "In a second separate aspect of the present invention, the engagement plate includes distal edges with tongues extendible to between the parallel legs of the steel web joist beam for interlocking engagement." This establishes that all that is required for interlocking engagement is that the engagement plate distal edges include tongues extendible between the parallel legs of the web joist and Koyama provides such structure

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in tongues 3e and 3f. While the last sentence of [0007] states, "Shoulders to either side of each tongue may abut against the edges of the legs", the use of the term "may" indicates that the shoulders are not required for interlocking engagement to exist. A stud extends from the first hole 3g to and beyond the second hole 2g, the stud is adapted to secure the anchor plate and the engagement plate to the beam of the steel web joist. The bolt acts as a support for an object suspended therefrom as indicated in claims 3-6 of Koyama. The tongues 3e and 3f are sandwiched by the first legs and act to hold the angle elements at a given interval (col. 3, lines 11-15) and thereby provide better dimensional stability to the beam thereby providing an engineering advantage. Applicant is reminded that "[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968). The Koyama reference would suggest to one of ordinary skill in the art that the engagement plate 3 would be prevented from lateral movement by the tongues 3e, 3f being interlocked between the first legs and therefore have the benefit of maintaining the threaded shaft in a position that prevents lateral movement of the attachment while also contributing to the greater dimensional stability of the beam. Further, Rebentisch (US 4784552) (figures 2, 3) teaching the upstanding engagement portions 24 extending at an obtuse angle substantially greater than 90 degrees from the flat anchor portion so as to form a biting edge to grip the legs 26 to thereby more securely hold the engagement plate to the channel and prevent it from moving (col. 2, lines 41-48), a significant advantage to maintain the correct position of the connection. Accordingly, it would have been obvious to modify the prior art described in the information disclosure statement received July 30, 2001 in parent

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application 09/844807 and made of record in this application to include upstanding engagement portions to either side of the flat anchor portion, the engagement plate extending across the cord space with each upstanding engagement portion having a distal edge with an engagement profile in interlocking engagement with the first legs as shown in Koyama so as prevent lateral movement of the engagement plate while also providing for greater dimensional stability of the beam and as to each upstanding engagement portion being at an obtuse angle substantially greater than 90 degrees to the flat anchor portion Rebentisch teaches that it would have been further obvious to have the upstanding engagement portions 24 extending at an obtuse angle substantially greater than 90 degrees from the flat anchor portion so as to form a biting edge to grip the legs 26 to thereby more securely hold the engagement plate to the channel and prevent it from moving (col. 2, lines 41-48), a significant advantage to maintain the correct position of the connection.

As to claim 2, the prior art as described in the information disclosure statement received July 30, 2001 in parent application 09/844807 and made of record in this application utilizes a nut to hold the square anchor plate in the form of the 962 square washer in place and fails to state that hole in the anchor plate itself can be threaded. However, Koyama recognizes the equivalence of a separate nut to secure the plate and a threaded aperture to secure a plate thereby providing a strong secure connection in the passage found in column 4, lines 23-28:

"According to the first embodiment, the fixing member 6 is screwed into the screw hole 3g defined on the lower metal fitting 3. However, the lower metal fitting 3 may have a small hole 3h therein through which the fixing member 6 is inserted and fixed by a nut 6b by way of a washer 6a as illustrated in FIG. 8."

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Accordingly, it would have been obvious to modify the anchor plate as described in the information disclosure statement received July 30, 2001 so that the hole itself is threaded in view of Koyama teaching that this is an equivalent desirable structure to having a separate nut in providing a strong connection.

Claim 3 is rejected under 35 U.S.C. §103(a) as being unpatentable over applicant's description of the prior art as described in the information disclosure statement received July 30, 2001 in view of Koyama (US 5259165) and Rebentisch (US 4784552) as applied to claim 1 above, and further in view of Steinke (US 4408928).

Further modification suspension system described by applicant as prior art so that the engagement plate suggested by Koyama has shoulders sandwiching the tongue, not just on one engagement portion, but on both would have been obvious in view of Steinke (figures 2-5) teaching that it is desirable to enhance the interlocking engagement by having shoulders 57 on each upstanding engagement portions so as to have a better interlocking securement (col. 5, lines 6-10).

Response to Arguments

Applicant's arguments filed January 16, 2004 have been fully considered but they are not persuasive. Applicant argues that the relative association of the components has been ignored. That is obviously not the case. Koyama is not the primary reference, the AFCON flyer and it accompanying disclosure statement is the primary reference and sets forth the relative association of the components as set forth in claim 1. Koyama teaches to one of ordinary skill in the art that the engagement plate 3 would be prevented from lateral movement by the tongues 3e, 3f being interlocked between the first legs and therefore have the benefit of maintaining the threaded shaft

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in a position that prevents lateral movement of the attachment while also contributing to the greater dimensional stability of the beam. In response to applicant's argument that the configuration of inclined engagement portions at an obtuse angle providing a specific advantage in creating some degree of flexibility and greater lateral rigidity as found in the remarks received January 16, 2004 on page 2, ¶3, lines 3-7) are not recited in the rejected claim(s) since no flexibility or rigidity is claimed and since flexibility is a property of the rigidity of the engagement plate, review of the specification as filed shows no disclosure of the engagement plate being flexible or having enhanced lateral rigidity nor is it necessitated. The claims cannot be allowed based on an argument of flexibility of the engagement plate on one hand and rigidity of the engagement plate on the other that fails to fall within the scope of applicant's disclosure and none of the needed characteristics are claimed and would be considered new matter if claimed. Rebentisch (US 4784552) (figures 2, 3) is relied upon for teaching the upstanding engagement portions 24 extending at an obtuse angle substantially greater than 90 degrees from the flat anchor portion so as to form a biting edge to grip the legs 26 to thereby more securely hold the engagement plate to the channel and prevent it from moving (col. 2, lines 41-48), a significant advantage to maintain the correct position of the connection.

Conclusion

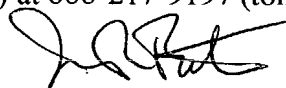
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent of Attwood (US 3053355, figures 1, 2) teaches pertinent engagement plate structure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Brittain whose telephone number is 703-308-2222. The examiner can normally be reached on M, W & F 5:30-1:30, T 5:30-2:00 & TH 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James R. Brittain
Primary Examiner
Art Unit 3677

JRB